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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,211

Applicant(s)

ONISHI, AKIKO

Examiner

CHAD DICKERSON

Art Unit

2625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-083)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-12 and 15-18 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims has necessitated the new ground(s) of rejection. However, the reference of Mori '696 is still being applied below. The Applicant stated in the remarks filed on 12/29/2008 that the Mori reference does not disclose the features of 1) setting a basic attribute that is applied to the whole print data, 2) setting a back-side attribute that is applied to a plurality of pages that corresponds to the back side of a printing medium and 3) pages that correspond to the back sides of printing media are discontinuous¹. The Examiner respectfully disagrees with these assertions.

When viewing the reference of Mori '696, the unique feature of book file editing is very important to note. Not only is the user able to edit a book file from an upper level in editing the book as a whole, but a user is also able to edit a book on the lowest level by editing page attributes. When looking at the claim language, it is clear that the basic attribute setting is disclosed through the book level editing aspect of the invention². An example of a book level attribute would be duplex printing. This will be an attribute applied to the whole book, or book data to be printed.

The next claim feature states that another setting screen is used to set back-side attributes for application on a plurality of pages that correspond to the backside of the

¹ See Applicant's arguments at pages 9-11.

² See Mori '696 figure 14, col. 11, ln 27-65.

printing medium output. If the user were to use the document shown in figure 20C, the user could have chapter 1 following the book level in being duplex printed, but have the zoom arranged in a different manner other than center, which is designated in the chapter level setting screen³. If the user changes chapter 1 to a certain zoom setting, this chapter may reflect the setting on all of the pages within that chapter. In other words, if the chapter is designated to be printed in a duplex manner, the back sides of the pages will be set to the certain zoom setting. When looking at figure 20C, if a certain zoom setting is designated, a setting screen is being used to set a back-side attribute that is applied to a plurality of pages that correspond to the back side of the printing medium within that chapter⁴. Since the chapter attribute may be independently applied to a certain chapter and not the whole book and the chapter attribute does apply to the backside attributes of a page, it is still believed that the Mori reference performs the above contended feature.

Lastly, regarding the newly added claim feature of back sides of pages being discontinuous, when looking at figure 20C, the chapter attributes set are applied to back sides of pages that are discontinuous, or pages that do not immediately follow one another. This feature can be also performed by having 4 pages in a chapter and the chapter settings being applied to all four pages, with the two back side pages reflecting the attribute of the chapter settings.

³ Id. at chapter attribute in figure 15.

⁴ Id. at col. 15, lines 13-55 and col. 18, ln 43 – col. 19, ln 32 with corresponding figures.

Therefore, with the above explanation, the newly added claim features below are still believed to be performed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-9, 11, 12 and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mori '696 (USP 7194696).

Re claim 1: Mori '696 discloses a printing control method of converting original data into print data processible by a printing apparatus, comprising the steps of:

displaying a first setting screen to set a basic attribute applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages each of which corresponds to the back-side of the printing medium output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is

used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

setting the basic attribute using the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50), and the back-side attribute using the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

generating the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58),

wherein the pages corresponding to the back sides of the printing media are discontinuous (i.e. as shown in figures 20 and 21, if back side printing is designated, there can be multiple back side pages that do not immediately follow one another; see figs. 20 and 21; col. 17, line 32 – col. 19, line 32).

Re claim 2: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, the basic attribute is applied for an item other than an item having the back-side attribute (i.e. in the system, when a higher level item, a book attribute, overlaps with a lower level item, a page attribute, the lower level item is given priority when it comes to what attribute to apply to a certain page. For instance, if a book attribute, considered as a basic attribute, overlaps in a setting with a page attribute, considered as a back-side attribute, the page attribute will be given priority and the attribute of the page will occur over the attribute of the book. Therefore, with the following example, the book attribute is applied to other pages in the document that do not have an overlapping page attribute and the feature of having the basic attribute applied to an item other than an item with a back-side attribute is performed with the following example; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62).

Re claim 3: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, the back-side attribute is applied to, as a unit, one side of the sheet serving as a printing medium (i.e. the page

attribute changes the specific page that is authorized by the user. This page can be the back-side or the front side of a document, with a page attribute being applied. Also, the page attribute can be limited to a back-side of a sheet in the document that has a printing method using the duplex printing method. The sheet that has the page attribute serves as a printing medium that will be printed out once the printing is desired by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 5: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, while the basic attribute and the back-side attribute are referred to, various parameters necessary to convert a page corresponding to a front side of a sheet and various parameters necessary to convert a page corresponding to a back side of a sheet are loaded in advance (i.e. before performing the conversion in the system, the settings from the book and page attributes for the front and back-side of the pages are set by the user and loaded into the system after a file is specified and opened. The attributes are considered to be the parameters that allow for the necessary conversions of data into a front and back side page and are loaded into the system in advance before the actual conversion occurs to the specified document; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and the parameters are alternately referred to in converting the pages (i.e. using both the book attributes and the page attributes, considered as the parameters, the data formed

from the attributes are referred to in order to convert the pages in the user's desired form. Each page is converted by referring to the attributes for each page, from the first page to the last page alternately, to convert each page in the desired manner; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 6: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, every time a page of interest is to be converted, various parameters for use are loaded and referred to by referring to the basic attribute and the back-side attribute (i.e. when a page or pages is to be converted in the system, the attributes that contribute in forming the page of interest is loaded into the system to referred to by the printer driver in order to from the desired book or document. The settings referred to are both the book attributes and the page attributes, which are both considered as the basic and back-side settings; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 9, lines 24-66 and col. 10, lines 1-30, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 7: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein the setting step comprises a sheet selection step of selecting a type of sheet serving as a printing medium, and types of sheets in the basic attribute and the back-side attribute are changed in accordance with the type of sheet selected in the sheet selection step (i.e. in the system, the chapter attribute is

the attribute that affects the sheet selection. When the sheet selection is performed when setting the chapter attributes, this sheet selection changes the sheet types (i.e. A4 or A5), and that both the book attribute and the page attribute uses in the setting of their respective attributes. Also, the sheets types used in both the page and book attributes are changed and affects the settings of both attributes. Therefore, above feature is performed; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 8: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, further comprising a step of, upon reception of a printing attribute value request from an application which generates the original data (i.e. the application (101) sends a predetermined, OS-dependent, output command to an output module of the OS which provides an interface. The output command includes data regarding print setting request that are in an original file form, but incomplete until the book editing application (104) works with the file; see fig. 1; col. 7, lines 40-65, col. 8, lines 1-67 and col. 9, lines 1-22), sending back a printing attribute value for generating original data convertible into print data corresponding to the basic attribute and the back-side attribute in the generating step (i.e. with the book editing application (104) detecting an output command and the incomplete original file, the book editing application sends back to the electronic original writer (102) directions to make the original file complete in a manner that applies the settings of the book and page attributes to the output commanded by the application (101). These applied settings

allow the original data to be converted into printable and complete data for use by the printer driver for output; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 9: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, a type of sheet subjected to printing can be selected (i.e. shown in figure 15, the paper size and orientation is an example of a type of sheet subjected to printing selected. In the figures, the types of sheets may be a different size and orientation; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), border-free printing attribute can be selected for each of the basic attribute and the back-side attribute in accordance with the selected type of sheet (i.e. with the book attribute being analogous to the basic setting, it is clear that the border line option in figure 14 reflects the choice of having a document printing with a border or a document that is border-free. Also, the page attributes are analogous to the back-side attributes since the page attributes deal with the front and back sides of sheets in the system. The page attributes can follow the attributes of the chapter and book attributes and because of this feature, the page attribute can have a border-free printing setting selected for the page attribute information in order to apply other page attribute editing to the selected page with the printing settings previously applied to a selected sheet; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and when a type of sheet capable of border-free printing is set, a printable region of border-free

printing is sent back to the application (i.e. once the user designates the option of having the page selected border-free, or no visible border line present, the editing options are sent back to the book editing application (104) from the user's input of settings to be sent to the application (101) in order for the application (101) to be able to make use of the electronic original writer (102) in order to convert an application data into an electronic original file; see figs. 1-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 11: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, when the double-sided printing attribute is done in the setting step (i.e. in the book attribute level, the system allows for the document to be formatted in the duplex, or double sided, printing method; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), original data of one page received from the application for one plane is converted into print data and output for all sheets subjected to printing (i.e. the front page or cover page of the document is received from an application (101) for the corresponding plane of the page and is converted into a print data when the book editing application (104) is used to convert the incomplete data into complete data that reflects the corresponding page of the duplex printing; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and original data of each page received from the application for the other plane is converted into print data for the received page (i.e. the other pages that are received from the

application are also converted into print data and these pages are considered to be the other plane. In the system of Mori '696, the pages, or planes of the pages, are all sent from the application (101) and converted into data edited by the book editing application (104) to make the print job received from the application a print job that reflects certain editing desired by the user and converted into a physical form; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 12: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, the basic attribute and the back-side attribute are changed in accordance with a printing attribute designated in the application (i.e. the user designates in the application (101) an output command that reflects the output. The book editing application is used to designate printing changes in the book and page attributes in the system. The user is allowed in the system to enter in settings regarding the modifications of the document that are used to affect the front and back-end of the pages. The book editing application (104) edits the document designated by the user for output with the changes of the book and page attributes; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 15: Mori '696 discloses a printing control apparatus which converts original data into print data processible by a printing apparatus, comprising:

display means for displaying a first setting screen to set a basic attribute to be applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages each of which corresponds to the back-side of the printing medium output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

setting means for setting the basic attribute using the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50), and the back-side attribute using the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a

printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

generating means for generating the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58),

wherein the pages corresponding to the back sides of the printing media are discontinuous (i.e. as shown in figures 20 and 21, if back side printing is designated, there can be multiple back side pages that do not immediately follow one another; see figs. 20 and 21; col. 17, line 32 – col. 19, line 32).

Re claim 16: Mori '696 discloses a printing control apparatus which converts input print data into print data printable by a printing apparatus and transfers the print data to the printing apparatus (see figure 13), comprising:

means for determining a basic attribute applied to whole drawing data (i.e. when the user enters in settings regarding the book, chapter or page attributes, the book editing application determines if the settings are entered in the system. The book editing application determines when the user enters in book attribute information that affects the whole drawing data that is acquired through existing files or by the creation

of the drawing data through the user's input into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

means for recording in a setting table the basic setting determined by said basic attribute determination means (i.e. the book setting information, considered as the basic settings, is stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in a block form shown in figure 12. Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

means for, when the drawing data is to be printed on two sides of each of a sheet, determining a back-side attribute applied to a plurality of pages each of which corresponds to back sides of the sheets (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

wherein the pages corresponding to the back sides of the printing media are discontinuous (i.e. as shown in figures 20 and 21, if back side printing is designated, there can be multiple back side pages that do not immediately follow one another; see figs. 20 and 21; col. 17, line 32 – col. 19, line 32);

means for recording in the setting table the back-side attribute determined by said means for determining the back-side attribute (i.e. as illustrated in figure 12, the book, chapter and page attribute information are stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in the block illustrated in figure 12. Along with other settings, the page attribute information, considered as the back-side settings, is stored as an electronic original file (103). Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62); and

generation means for generating the print data based on the basic attribute and the drawing data when the drawing data of an object page is data to be printed on the front side of a plurality of sheets, generating the print data based on the back-side attribute and the drawing data when the drawing data of the object page is data to be printed on the back side of a plurality of sheets (i.e. in the system of Mori '696, the settings of both the book attributes and the page attributes are applied to the pages in a document. These attributes are used by the book editing application in the generation

of the data to reflect the attributes set in the system. Figure 19 is an example of certain attributes in book, chapters and pages settings that effect individual pages and reflect the settings inputted by the user. When it comes to the generation of a page in the system, the page is converted based on the page setting information and the actual original data that corresponds to the page, or data to be drawn on the page. When in duplex printing, the front side of a duplex page is generated in terms of the page information related to the front page and the same generation step of the back page also occurs. Therefore, when the system prints any page in the system, the system refers to information shown in both figure 3 and figure 12. Figure 3 shows the page setting, or attribute, information for each page in the system such as the actual original data to be drawn on the page, which can include the front or the back end of a page. Figure 12 shows the side information that is setting, or attribute, information specific to the side of a page such as the actual data, or original data, to be drawn on the page; see figs. 3-6 and 12-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 15, lines 10-56, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 17: Mori '696 discloses computer-readable medium storing a computer program for recording a program for converting original data into print data processible by a printing apparatus (i.e. see col. 25, line 45 – col. 26, line 32; also see figure 13), the program comprising the steps of:

displaying a first setting screen to set a basic attribute applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail

settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute applied to a plurality of pages each of which corresponds to the back-side of the printing medium output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

setting the basic attribute using the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50), and the back-side attribute using the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the

above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62);
and

generating the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58),

wherein the pages corresponding to the back sides of the printing media are discontinuous (i.e. as shown in figures 20 and 21, if back side printing is designated, there can be multiple back side pages that do not immediately follow one another; see figs. 20 and 21; col. 17, line 32 – col. 19, line 32).

Re claim 18: Mori '696 discloses a computer-readable medium storing a computer program for converting input drawing data into print data printable by a printing apparatus and transferring the print data to the printing apparatus (i.e. see col. 25, line 45 – col. 26, line 32; also see figure 13), the program comprising:

a step of determining a basic attribute applied to the whole drawing data (i.e. when the user enters in settings regarding the book, chapter or page attributes, the book editing application determines if the settings are entered in the system. The book editing application determines when the user enters in book attribute information that affects the whole drawing data that is acquired through existing files or by the creation of the drawing data through the user's input into the system; see figs. 3-6 and 9-18; col.

7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66, col. 18, lines 1-62 and col. 25, lines 45-66);

a step of recording in a setting table the basic attribute determined in the basic setting determination step (i.e. the book setting information, considered as the basic settings, is stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in a block form shown in figure 12. Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

when the drawing data is printed on two sides of each of a sheet, determining a back-side attribute applied to plurality of pages each of which corresponds to back sides of the sheets (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

wherein the pages corresponding to the back sides of the printing media are discontinuous (i.e. as shown in figures 20 and 21, if back side printing is designated,

there can be multiple back side pages that do not immediately follow one another; see figs. 20 and 21; col. 17, line 32 – col. 19, line 32);

recording in the setting table the back-side attribute determined in the step of determining the back-side attribute (i.e. as illustrated in figure 12, the book, chapter and page attribute information are stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in the block illustrated in figure 12. Along with other settings, the page attribute information, considered as the back-side settings, is stored as an electronic original file (103). Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62); and

a generation step of generating the print data based on the basic attribute and the drawing data when the drawing data of an object page is data to be printed on the front side of a plurality of sheets, generating the print data based on the back-side attribute and the drawing data when the drawing data of the object page is data to be printed on the back side of a plurality of sheets (i.e. in the system of Mori '696, the settings of both the book attributes and the page attributes are applied to the pages in a document. These attributes are used by the book editing application in the generation of the data to reflect the attributes set in the system. Figure 19 is an example of certain attributes in book, chapters and pages settings that effect individual pages and reflect

the settings inputted by the user. When it comes to the generation of a page in the system, the page is converted based on the page setting information and the actual original data that corresponds to the page, or data to be drawn on the page. When in duplex printing, the front side of a duplex page is generated in terms of the page information related to the front page and the same generation step of the back page also occurs. Therefore, when the system prints any page in the system, the system refers to information shown in both figure 3 and figure 12. Figure 3 shows the page setting, or attribute, information for each page in the system such as the actual original data to be drawn on the page, which can include the front or the back end of a page. Figure 12 shows the side information that is setting, or attribute, information specific to the side of a page such as the actual data, or original data, to be drawn on the page; see figs. 3-6 and 12-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 15, lines 10-56, col. 17, lines 15-66 and col. 18, lines 1-62).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696, as applied to claim 1, and in further view of Gillihan '262 (USP 6842262).

Re claim 4: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, data generated by an operating system is converted into the print data in accordance with the basic attribute and the back-side attribute while the back-side attribute is preferentially applied (i.e. whether the data is imported into the system, or the file of the document already exist, the data generated by the operating system is converted into the print data that is in accordance with the book attribute information, considered as the basic setting, and the page attribute information, considered as the back-side setting. This can occur by the user setting the appropriate settings and the conversion occurring to the document, after the appropriate settings are entered in by the user and performed by the system; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach metadata.

However, this is well known in the art as evidenced by Gillihan '262. Gillihan '262 discloses metadata (i.e. As shown in figures 5 and 6, the reference of Gillihan '262 deals with document processing. This document processing is similar to the document processing of Mori '696, since both affect the output of the image data on a printing device. However in Gillihan '262, an electric document can be printed from an application program to an intermediate metafile that is stored in memory. The intermediate metafile can be edited and translated into a specific PDL in order to be printed by a printer. The metafile is considered to be the metadata since the metafile is simply data that describes some other data, which is the definition of metadata; see col. 5, lines 22-29).

Therefore, in view of Gillihan '262, it would have been obvious to one of ordinary skill at the time the invention was made to have metadata in order to have data transferred to a metafile format that can be used for printing (as stated in Gillihan '262 col. 3, lines 20-36).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696, as applied to claim 1 above, and in further view of Livingston '590 (USP 6621590).

Re claim 10: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, monochrome printing can be selected for each of the basic attribute and the back-side attribute (i.e. in the system, it is clear that most printing systems offer and chose to print documents in black and white. In Mori '696, it is understood that the system chooses to print documents in black and white in order to offer the print out to a user. For both the book and page attribute information, which both are considered analogous to basic and back-side settings, it is clear that the system automatically chooses the black and white, or monochrome, printing to be selected; see figs. 1-3 and 7; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62), and printing attribute is sent back to the application (i.e. the printing settings set by the user through the book and page attributes are sent back to the book editing application and these settings are used to work with the other application (101) and the electronic original writer (102) to make a complete printable document for the system to print reflecting the editing changes; see

figs. 1-3 and 12-14; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach color printing can be selected for each of the basic attribute and the back-side attribute, and color printing attribute is sent back to the application.

However, this is well known in the art as evidenced by Livingston '590. Livingston '590 discloses color printing or monochrome printing can be selected for each of the basic attribute and the back-side attribute, and color printing attribute is sent back to the application (i.e. Like Mori '696, the reference of Livingston '590 is used to different document processing options to affect the output of the image data. However, Livingston '590 provides the setting for choosing color text instead of the normal black and white text. The choices of printing between the two available print color options are available. With the incorporation of this feature, once the choice is made, the color printing option in Livingston '590 can be used to be sent back to the application in the invention of Mori '696; see figs. 3-5; col. 5, lines 1-26).

Therefore, in view of Livingston '590, it would have been obvious to one of ordinary skill at the time the invention was made to have color printing or monochrome printing can selected for each of the basic setting and the back-side setting, and color printing setting is sent back to the application in order to offer the user-selectable feature of choosing color text or using black and white text (as stated in Livingston '590 col. 5, lines 1-26).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. Shiki '108 (US Pub No 2003/0094108) discloses a system that discloses a display that allows a user to set the color attribute of a front and rear side of a double-sided printing job.
9. Mori '385 (USP 7046385) discloses a book file editing system similar to Mori '385.
10. Nakajima (US Pub No 2005/0253886) discloses an ink jet, printer control unit, printer system including the same, and storage medium with the operation program of the printer control unit stored for controlling double-side printing which discloses a system shown in figure 19 that is able to modify the front and back sides of pages separately.
11. Knodt (USP 5124731) discloses a system where a job can change whether printing can occur on a front side or a rear side of a page. This printing option can be considered as an attribute of a page.
12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2625

/C. D./

/Chad Dickerson/

Examiner, Art Unit 2625

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625